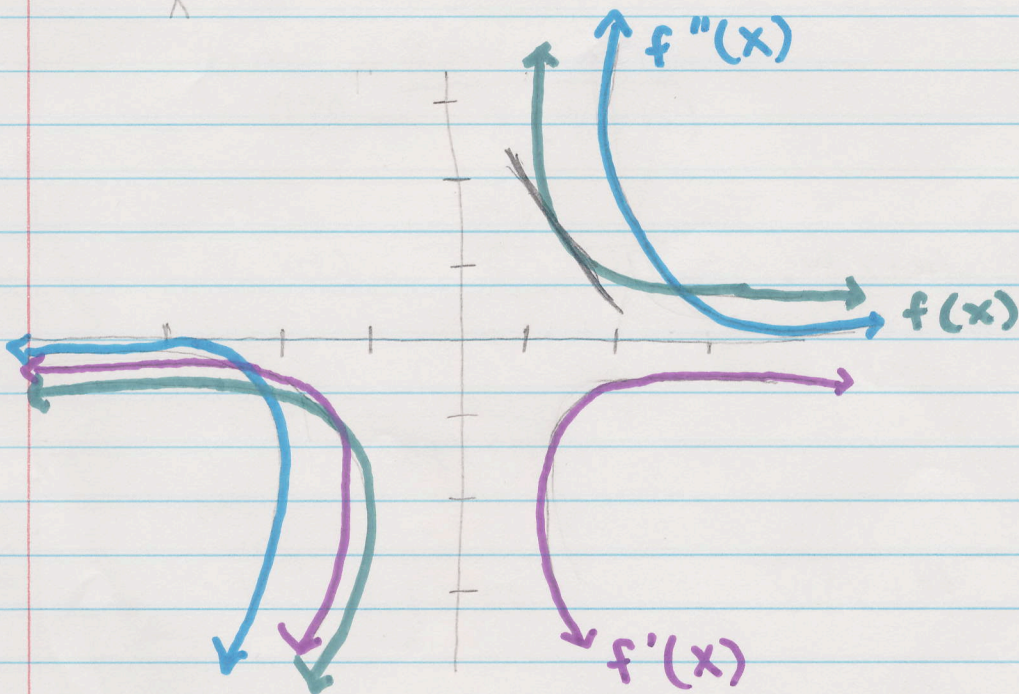


$$\lim_{h \rightarrow 0} \frac{(2x+h)}{(x^4 + 2x^2h + x^2h^2)}$$

$$\frac{2x+0}{x^4 + 2x^2(0) + x^2(0^2)}$$

$$\frac{2x}{x^4}$$

$$f''(x) = \frac{2}{x^3}$$



$f'(x)$ is $-1/x^2$ because no matter which line you take the secant slope of it is always negative.

$f''(x)$ is $2/x^3$ because it has lines in the 3rd & 4th quadrants of the graph making one secant slope positive and one negative. If a positive number was put in the x^3 it would stay positive, the same goes for a negative #.